No Privacy, No Peace?
Technological Surveillance and the Spatial Struggle of Black Lives Matter Protests

Research Thesis

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by

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Abstract

This paper investigates the relationship between technological surveillance and the production of space. In particular, I focus on the surveillance tools and techniques deployed at Black Lives Matter protests and argue that their implementation engenders uneven outcomes concerning mobility, space, and power. To illustrate, I investigate three specific forms and formats of technological surveillance: cell-site simulators, aerial surveillance technology, and social media monitoring tools. These tools and techniques allow police forces to transcend the spatial-temporal bounds of protests, facilitating the arrests and subsequent punishment of targeted dissidents before, during, and after physical demonstrations. Moreover, I argue that their unequal use exacerbates the social precarity experienced by the participants of demonstrations as well as the racial criminalization inherent in the policing of majority Black and Brown gatherings. Through these technological mediums, law enforcement agents are able to shape the physical and ideological dimensions of Black Lives Matter protests. I rely on interdisciplinary scholarly inquiry and the on-the-ground experiences of Black Lives Matter protestors in order to support these claims. In aggregate, I refer to this geographic phenomenon as the spatial struggle of protests.

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Note to the Reader

Researching Black Lives Matter protests presents a number of challenges; one of which being that police brutalize and murder Black people on a seemingly daily basis. This has rendered some aspects of my inquiry outdated. In fact, four days before I defended this thesis on 15 April 2021, police in Brooklyn Center, Minnesota shot and killed 20-year-old Daunte Wright. The shooting happened just ten miles from where Derek Chauvin was on trial for the murder of George Floyd. On the same night Chauvin was found guilty on all three counts, police in my hometown of Columbus, Ohio shot and killed 16-year-old Ma'Khia Bryant. Due to the frequency of racialized state violence, I do not mention Ma'Khia or Daunte in this paper. This brings me to the purpose of this note: as researchers studying police violence, we must remember that our insights are contingent on the brutalization of Black and Brown bodies. We are forever indebted to the sacrifices marginalized activists in particular make on a continual basis, as without them, research papers such as the one before you would not be possible. As I write this note, demonstrators are gathering in cities across the country to protest the unjust deaths of Ma'Khia, Daunte, and countless other Black people. To the reader: I hope that you keep this in mind as you peruse the following pages of this undergraduate thesis.

1. Introduction

Throughout the summer of 2020, amid an unprecedented viral pandemic and economic depression, tens of millions of Americans took to the streets to protest against police brutality.[1] Their activism came in the wake of a series of brutal murders at the hands of law enforcement, with the untimely death of George Floyd, a Black father in Minneapolis, sparking the initial wave of unrest. At these historic protests, a plethora of police surveillance technologies were used to push back against protestors. These systems included military-grade drones, biometric screening (e.g., facial recognition and tattoo identification), cellphone location tracking and wireless message interception, social media monitoring, automatic license plate readers, and more. These protests were not the first time racialized bodies have endured technological forms of policing; the digitized monitoring of Reverend Martin Luther King Jr., Minister Malcolm X, Claudia Jones, Marcus Garvey, Esther Cooper Jackson, and other social activists by various intelligence and security agencies comes to mind.[2] In this thesis, I contend that notwithstanding the pervasive and prolonged nature of anti-Black surveillance, the advent and widespread implementation of advance monitoring techniques sparks new questions regarding the intersections of race, human mobility, social precarity, carceral politics, technological advancement, activism, and data privacy. For example, documents obtained and published by *The Intercept* in March 2018 reveal that the Federal Bureau of Investigation (FBI) tracked the cross-country movements of a Ferguson-bound activist flying in from New York City during the height of Black Lives Matter (BLM) protests in late 2014. The declassified report reveals

[1] See "Black Lives Matter May Be the Largest Movement in U.S. History" in *The New York Times*: https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-crowd-size.html.
[2] For more information, see Ashley Farmer's "Tracking Activists: The FBI's Surveillance of Black Women Activists Then and Now" (2020); Ward Churchill and Jim Vander Wall's *Agents of Repression: The FBI's Secret War Against the Black Panther Party and the American Indian Movement* (1988); Theodore Kornweibel's *Federal Surveillance of Afro-Americans (1917 – 1925): The First World War, the Red Scare, and the Garvey Movement* (1986); and Carole Boyce Davies' *Left of Karl Marx: The Political Life of Black Communist Claudia Jones* (2007).

sensitive demographic information about the suspect, including their social security identification and criminal history, but the means in which their travel plans were acquired remains unknown.[3] Six years later, and just five days after George Floyd's murder, the FBI arrested Mike Avery, a Black activist from St. Louis, after the agency accused him of inciting riots via posts on his Facebook page. The charges were later dropped, with Avery's lawyer stating that her client's sudden arrest was a "clear violation of his constitutional rights, both freedom of speech and freedom of assembly."[4] I ask: what do these instances of *racialized surveillance*[5] reveal to us? How can racialized surveillance help to explain the contemporary relationships between urban space, power, and discriminatory information processing?

According to Francisco Klauser, surveillance *in abstracto* can be understood as "a mode of power that interacts with space" (Klauser 2017: 5). As a mode of power, surveillance is exerted unevenly over space and the bodies that occupy it, generating uneven capacities to move freely without some form of undisclosed monitoring. Notwithstanding the seemingly omnipresent nature of surveillance (i.e., mass surveillance), we find that, as a geographic product of racial reification, carceral forces utilize surveillance as a means of restricting the mobility of Black and Brown populations. This phenomenon is not a linear consequence of technological advancement, but rather a byproduct of the state's historic subjugation of vulnerable communities. Indeed, the history and evolution of surveillance of minoritized populations dates back centuries, with the first descriptive instances of this practice taking place in America during

[3] See "FBI Tracked an Activist Involved with Black Lives Matter as They Traveled Across the U.S., Documents Show" in *The Intercept*: https://theintercept.com/2018/03/19/black-lives-matter-fbi-surveillance/.
[4] See "FBI trawled Facebook to arrest protestors for inciting riots, court records show" by NBC News: https://www.nbcnews.com/tech/social-media/federal-agents-monitored-facebook-arrest-protesters-inciting-riots-court-records-n1231531.
[5] Here, I understand racialized surveillance as it is defined by Simone Browne: "when enactments of surveillance reify boundaries along racial lines, thereby reifying race, and where the outcome of this is often discriminatory and violent treatment" (Browne 2015: 8).

the transatlantic slave trade (Browne 2015). In our day, this process continues. Facilitated on one hand by new forms of computer, digital, and spatial technology and, on the other, by changes in the organization of capitalist society, the evolution of racialized surveillance has undergone unprecedented mutations. Information capital's assemblage with the carceral state has been inaugurated through public-private partnerships engendered or upheld by university systems, the criminal justice apparatus, and corporations such as General Electric, IBM, Verizon Enterprise Solutions, and other tech giants (Jefferson 2020). This *hypercarceralization* (Ibid.: 181-182), which begets the mitigated mobility of Black and Brown populations via state surveillance, has undermined the ability of these groups to organize politically, advance their socioeconomic interests, and avoid increased harassment and profiling by security forces. I will therefore argue that the emergence of new modes of technological surveillance (modes operationalized with despotic or profit-seeking intent) exacerbates the social precarity these populations hitherto experience as a result of systemic racism.

To advance these claims, I take BLM protests as a case study. Through a critical geographic lens, I will demonstrate how space and power interweave within the context of racialized surveillance and communicate how the carceral state's intrusion in the lives of Black and Brown activists produces uneven outcomes regarding mobility, social power, and personal security. I rely here on a case study because such specificity allows us to "advance a range of more general claims regarding the cross-cutting spatial logics, power dynamics, driving forces and implications of differing forms and formats of surveillance" (Klauser 2017: 7). Moreover, despite the existence and dangers of algorithmic decision-making in the context of courts and criminal justice,[6] I will be focusing primarily on the direct impact(s) of law enforcement

[6] See, for example, "Machine Bias" in *ProPublica*: https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

surveillance technologies because, in the words of Brian Jefferson, police are "the first point of contact between criminalized subjects and the carceral state" (Jefferson 2020: 8) – a topic of surveillance studies that remains understudied. Before I delve into my analysis, however, I will briefly discuss a select range of literature concerning surveillance of the racialized body, both historic and modern, as well as reach a sound geographic understanding of spatial control. In the end, our aggregate knowledge will be used to uncover what the proliferation of technological surveillance entails for the well-being and material future of the western world's vulnerable and historically disenfranchised.

2. Literature Review

The Political Geography of Surveillance

The problematic of surveillance and space has inspired a wide range of academic literature. Hille Koskela (2000), for example, argues that the advent of video surveillance has influenced – on an emotional level – the ways in which we experience and conceptualize urban space. Iriana van Aalst and colleagues (2014) complement Koskela's argument when finding that video-surveillance does not significantly improve perceptions of public safety amongst urban night life residents and that policy makers tend to overestimate its benefits. Haim Yacobi (2002) finds that city planning, forced displacement, and panoptic monitoring has contributed to maintaining the demographic engineering taking place in the Israeli city of Lod. He moreover argues that through continued spatial protest, which he defines as "autonomous initiatives reflecting personal and social needs that challenge the interests of those in power" (Ibid.: 56), the Palestinian population of Lod can combat the surveillance mechanisms facilitating their oppression.

Through both empirical and theoretical methodologies, scholars of varying socio-spatial phenomenon have been moving us toward what some have called a *political geography of surveillance*. According to Klauser, a political geography of surveillance must be studied through its mediations and mediators; that is to say, through the processes and means in which surveillance is being conducted (Klauser 2017: 25). Because perceptions of surveillance are idiosyncratic, this approach allows us to understand the unequal power relations and motivations underpinning specific forms and formats of surveillance. Indeed, approaching surveillance studies through the lens of political geography provides us with unique investigative tools, such as the language of mediations and mediators, that, in turn, allow us to provide crucial insights into varying socio-spatial phenomenon, such as demonstrations. With such tools at our disposal, I can begin to unpack how *power-geometry* (Massey 1993) reveals itself through racialized modes of policing and surveillance.

Codifying Blackness

Dark Matters: On the Surveillance of Blackness (2015) by Simone Browne investigates historical and contemporary accounts of surveillance – such as eighteenth-century Lantern Laws in New York City that governed Black mobilities at night and the disproportionate biometric screening of Black women in airports more recently – by inaugurating 'Blackness' as the condition of interest. Browne problematizes the surveillance of Blackness as a process that, despite being ubiquitous and distorting to those who experience it, is often unseen and unperceived by those who study it. As such, *Dark Matter* allows us to understand technological surveillance as a racializing act that transcends modernity by shifting focus toward "the transatlantic slave trade and its afterlife" and how this genealogical narration of Black experience

"makes visible the many ways that race continues to structure surveillance practices" (Browne 2015: 11). For example, *The Book of Negroes*, a British record of Black escape from New York to Canada following the American Revolutionary War, provides an account of state identification and tracking of the racialized body that represents an archaic predecessor to the modern passport, Browne argues, due to its ability to regulate movement across international borders (Ibid.: 70). Browne further asserts that the physical branding of enslaved Africans with iron tools and the use of biometric information technology as a means of confirming identity both produce *ontological insecurity* by rendering Black bodies commodifiable and potentially 'out of place' within particular areas. Through these examples and more, Browne allows us to understand racialized surveillance and its history as the political byproduct of attempts to regulate, misrepresent, and redefine Black identity.

Moving more towards the racialized impacts of technological innovation, in *Race After Technology* (2019) Ruha Benjamin presents a critical analysis of how emerging technologies reinforce and proliferate social bias against minorities, a phenomenon she refers to as the "New Jim Code." In the third chapter of her piece titled "Coded Exposure: Is Visibility a Trap?", Benjamin briefly discusses the apartheid state in South Africa's usage of Polaroid's ID2 cameras to "better capture Black citizen's images for the infamous passbooks that violently restricted the movement of Black people throughout the country" (Benjamin 2019: 106). Rights to mobility, in the South African context, were restricted through a relatively simple technological medium, a concept that we will return to later on. This act of state-sanctioned documentation predates more technologically advanced modes of racialized surveillance discussed in her piece. This includes but is not limited to: the UK's Human Provenance Pilot Program, which used "genetic testing and isotope analysis to vet asylum claims" (Ibid.: 129); India's ongoing Aadhaar project, which

entails the issuing of a unique twelve-digit identification for all citizens at the expense of vulnerable populations, such as women and transgender people, whom critics insist will face the brunt of increased policing and possible discrimination by consequence of this program (Ibid.: 133); and Kuwait's National DNA initiative, a 2015-era policy that mandates the submission of DNA samples to state databases, jeopardizing the citizenship rights of the stateless Bidoon people whom the Kuwaiti government considers "illegal residents" within the country (Ibid.: 135). By referencing these instances of racialized surveillance, Browne reinforces her concept of 'race as a technology.' That is, the construct of race itself serving as an arbiter of social divisions and hierarchical structures (Ibid.: 36 – 40).

Though several of these aforesaid instances of racialized monitoring exist outside the confines of American political discourse, they all nonetheless serve as important callbacks to Frantz Fanon's writings on epidermalization – or the internalization of inferiority – by the Black man in relation to his White oppressors (Fanon 1952) – or in these previous cases, the marginalized body in relation to the state. Digital epidermalization therefore follows that ontological insecurity can be codified through the implementation and use of emerging biometric instruments such as e-passports, facial recognition systems, and fingerprint scanners (Browne 2010). Through these digitized mediums, biometric tools operate as proxies that "speak the 'truth' of and for muted bodies" (Ibid.: 135). Understanding the racial components of power-geometry is thus crucial for understanding the motivations mediating state surveillance. I will expand upon this concept in the following section by providing a brief inquiry into the spatial logic(s) buttressing surveillance and control.

3. On Surveillance and Control

In the *Production of Space* (1991) Henri Lefebvre introduces us to his theory on the society-space dialectic. In his work, Lefebvre posits that our world is in a constant state of change. From a relational standpoint, space is produced from complex and incalculable interconnections that exist between both human actors and nonhuman objects. As a result of our dynamic reality, Lefebvre argues that we must investigate society and space as ongoing processes, upholding the notion that our world is in a constant state of becoming. Building on this analysis, Lefebvre attempts to 'spatialize dialectics' by arguing that the entropic nature of our world can be recontextualized to better understand space as an engineered mode of production. In brief, *space is the product of social power and social relations, and social relations and social power are the product of space* (Lefebvre 1991: 33, 82-83, 115). Because surveillance can be understood as a mode or technique of social power, it logically follows that *space is actively shaped by surveillance practices and technologies, and surveillance practices and technologies are actively shaped by space* (Klauser 2017: 36). As such, "specific spaces of surveillance must be studied as a dynamic and complex whole, mediating, and mediated by, the complex interplays of the built environment, human agents, technologies, material objects, etc." (Ibid: 37). *The Book of Negroes*, a surveillance technology that Browne argues structured New York as both "a space of terror and a site of freedom" (Browne 2015: 73), serves as an important example of the geographic impacts of Lefebvre's dialectic. As a mediator of colonial power, its multilayered reconfiguration of space was conceived by British authorities for the benefit of slave catchers, but its mitigation of mobility was experienced almost exclusively by Black people seeking emancipation. As a result, space was constricted through its record while its record simultaneously relied on the racialized moderation of New York's space.

I reference Lefebvre's work here to emphasize how surveillance implies power and power begets control. Particularly, the socio-spatial control of mobile bodies. Luis Fernandez (2008) adopts the term *social control of dissent* to describe how space for political dissidents is strategically (re)engineered by the state apparatus to secure strategic advantages at protests. According to Fernandez, this process can be broken down into three spheres of control: the legal sphere, the physical sphere, and the psychological sphere. The legal sphere encompasses the legal mechanisms used to "regulate, manage, and pacify" political activism; the physical sphere refers to "the control of large groups of people in a given physical space"; and the psychological sphere involves the production of "attitudes, fears, and uncertainties" with respect to radical protests (Ibid.: 32 – 34). Although Fernandez states in the endnotes of his book that the social control of dissent is specific to "social movements, street protest, and general challenges to the state" and thus "excludes all the other social control mechanisms that also exist in society" (Ibid.: 173), other scholars have observed the three aforesaid spheres of control in unrelated contexts. Sharad Chari (2008), for example, indirectly detects these spheres when applying Lefebvre's triad model of spatial practice, representations of space, and representational spaces to three historic accounts of state subjugation. This includes demographic spatial divisions in Nazi death camps,[7] contemporary urbicide and degradation of Palestinians through architectural segregation in Jerusalem, and mass incarceration as a spatial-temporal 'fix' to California's political economy in crisis. By deducing how race, racism, and biopolitics articulate spatially within these diverse examples, Chari demonstrates how "racial technologies span war and peace and renew older racial ideologies for new purposes of crisis management" (Chari 2008: 1918). Helga Tawill-

[7] As Browne notes in her reading, Joe Feagin's "White racial frame" can help us understand the racist justifications for intergroup divisions in forced labor camps more broadly. Within the context of plantation slavery, we witness the White racial frame as a mechanism for "categorizing difference, where Blackness is framed as unruly, with some said to be more unruly than others" (Browne 2015: 95).

Souri (2012) interrogates Israel's byzantine system of state-issued identification cards that induce political, social, and economic precarity via the immobilization of Palestinians living in the West Bank, Gaza, and Jerusalem. Through the use of these ID cards, Israel's security regime is able to exercise socio-spatial control across the occupied Palestinian territories that produce uneven mobilities which differentiate the population (and grant citizenship) based on ethnicity, religion, and national heritage.[8] As a result, "Jewish-Israeli mobility is largely un-bounded either in Israeli or Palestinian spaces, whereas Palestinians are often forbidden from moving within their own spaces, let alone in/out of Israel" (Tawill-Souri 2012: 164), a spatial phenomenon that speaks greatly to the legal, physical, and psychological dimensions of controlling dissent (or in this case, mobility).

In both studies, the authors investigated the demographic underpinnings of socio-spatial control and surveillance; a mode of inquiry that is somewhat missing from Fernandez's research. My analysis, while specific to police surveillance technologies, will involve a similar demographic approach but with a particular focus on political geography. Through this lens, I will analyze how Blackness and one's proximity to Blackness spatially articulates when participating in BLM demonstrations.

4. Surveillance and Space at Black Lives Matter Protests

Actors and Intentions

> War is no longer a distinct event in time, but instead diffracts into a series of micro-operations, by both military and police, to ensure security (The Invisible Committee 2009: 57).

[8] It is interesting to note how the use of ID cards in Israel represent what Browne (2010) refers to as the formation of the 'stable self.' In other words, "once the self can be certified by the state as stable, an increased freedom of mobility and stability can be granted" (Ibid., 140). This, however, brings up a few questions: what constitutes stability? And how is access to mobility rights restricted through arbitrary and oftentimes discriminatory definitions of stability?

If our aim is to capture the spatial outcomes and racialized implications of technological surveillance, it is crucial that we first acquire an understanding of the actors and intentions mediating the systems behind such forms of surveillance (Klauser 2017: 93). At protests, surveillance is used by law enforcement agencies to monitor and control dissent. Borrowing from Michel Foucault's *governmentality* framework, this particular orchestration of space results in two forms of power exertion: security, or the management of group freedom, and discipline, or the forced 'normalization' of individual actors (Foucault 2007, Klauser 2017: 64 – 70). Exercises of security at protests might involve setting up barriers and strategic formations, restricting access to public spaces, creating temporary city ordinances to discourage or criminalize acts of dissent, choosing geographically favorable locations to defend, training officers in preparation for an event, and so on (Fernandez 2008). Exercises of discipline, on the other hand, might entail mass arrests, the "less-lethal" deployment of rubber bullets and tear gas, intelligence operations against specific persons of interest, etc. Regardless of function or intent, the varying forms and formats of security and discipline all fall within either the legal, physical, or psychological spheres of policing dissent. These 'textures of control' are crucial in establishing police dominance at protests.

Police actions at demonstrations can result in questionable, if not completely inappropriate exercises of security and discipline. Take, for instance, when riot troops stormed a largely peaceful vigil for Elijah McClain, a 23-year-old Black man who was murdered by Aurora police in 2019. Police used pepper spray at the event to disperse a group of local musicians playing violins in Elijah's honor, and three people were subsequently arrested. According to Aurora Police, these actions were employed because "a small group of people gathered rocks [and] sticks, knocked over a fence, and ignored orders to move back." One might wonder why

the alleged conduct of a few fringe protestors would result in such a superfluous mode of disciplinary action. It seems that in the eyes of Aurora police, however, that small group of dissidents – armed with rocks and sticks against their military-grade weaponry – posed a threat immediate and foreboding enough that such an exercise of security was deemed necessary.[9]

Police actions at demonstrations are also scripted or unscripted in their procedural logics. In other words, they are produced by either structured templates and norms or individual goals, intentions, and desires, respectively. As Klauser puts it in his case study regarding interactions of scale in sport mega-event security, security governance is "the outcome of multiple agencies, driving forces and motivations… as well as diverse national and local predispositions and impulses in security matters" (Klauser 2017: 124). Indeed, it is not only the surface-level intentions of law enforcement that mediate the various forms and formats of surveillance implemented at protests, but also the political will of lawmakers, the collaborative partnerships between police and federal agencies, the racism against Black and Brown bodies, and the violent history of the U.S. security apparatus, just to name a few possibilities.[10] To illustrate, the perverse action of two Buffalo police officers shoving a 75-year-old BLM protestor to the ground, causing him to fracture his skull and bleed from his ears, was not planned at a pre-event security meeting. However, the strategic decision to secure the area where the confrontation took place, facilitating that unscripted exercise of discipline, was predetermined.[11] Moreover, the FBI's 2017-2019 designation of "Black Identity Extremism" (BIE) as a major domestic terrorism

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[9] See "Elijah McClain: police use pepper spray to disperse violin vigil" in *The Guardian*: https://www.theguardian.com/us-news/2020/jun/29/elijah-mcclain-colorado-police.

[10] Some examples found in our reading include the involvement of non-carceral forces, such as university research centers (Jefferson 2020: 80) and real-estate capitalists (Ibid: 97) in the crafting of carceral technologies. Fernandez (2008) also notes how the Patriot Act informed augmented surveillance and counterterrorism operations in immediate aftermath of the 2001 September 11 terrorist attacks on the World Trade Center.

[11] See "Riot police shove elderly man onto ground at New York protest, leaving him unconscious" in *The Independent*: https://www.independent.co.uk/news/world/americas/buffalo-police-riot-man-pushed-video-new-york-video-a9550171.html.

threat precipitated the indiscriminate surveillance and targeting of Black radicals. This included Christopher Daniels, a Dallas native and cofounder of the Huey P. Newton Gun Club and Guerilla Mainframe (GMF), who was charged with unlaw possession of a firearm under the BIE designation.[12] In Philadelphia, Ruby Anderson was arrested at a BLM protest while she was "standing next to two White people who were doing the same thing [as her]." She further disclosed that, "I was the only one arrested in my group of three, I was the only Black person."[13] Regardless of the specific actor or mechanism, all of these aforementioned displays of security and discipline contribute to the proliferation, intensity, and complexity of contemporary policing. The web of relations between the actors, strategies, policies, and emotions observed or deployed at protests, in turn, inform the racialized dimensions of surveillance.

Police are, of course, not the only actors at demonstrations. Situated on the other end of our dialectic, we have protestors. For our purposes, BLM protestors seek to express their opposition to racial injustice and police violence through political performance in public space. This includes civil disobedience and direct action, as well as less confrontational modes of dissent. Similar to police forces, the observed actions of protestors are both scripted and unscripted; however, when compared to law enforcement, these agents face significantly steeper barriers when attempting to realize collective action. By consequence, they are often less effective in their demonstrative intentions. Police infiltrations, surveillance, and stalking of dissidents further exacerbates the issue, as these strategic operations induce unhealthy levels of paranoia that detract from the movement's larger goals (Fernandez 2008). Take, for example, when former Deputy Police Chief Todd Osumdonson went undercover at a BLM protest in

[12] See "US judge orders release of 'first Black Identity Extremist' in *Al Jazeera*: https://www.aljazeera.com/news/2018/5/5/us-judge-orders-release-of-first-black-identity-extremist.
[13] See "'They set us up': US police arrested over 10,000 protestors, many non-violent" in *The Guardian*: https://www.theguardian.com/us-news/2020/jun/08/george-floyd-killing-police-arrest-non-violent-protesters.

Fargo, North Dakota, shouting "fuck the cops" as he attempted to identify potential "agitators" within the crowd;[14] or, when FBI investigators intimidated four activists who organized peaceful BLM rallies in Cookeville, Tennessee by visiting their homes and workplaces unannounced.[15] As a result of these types of actions (which aim to further vilify and suppress dissidents) the power-geometry of protests tends to skew in favor of the police.

The power wielded by law enforcement is not absolute. While police mobilize security and discipline as instruments of spatial control, demonstrators and other subjects of surveillance rely on varying forms and formats of resistance to weaponize their political dissent. This can include blocking roadways, tearing down police barriers, and organizing affinity groups, as was observed in various anti-globalization protests throughout the past several decades (Ibid.). When the participants of such actions are marginalized bodies, Browne refers to this resistance as *dark sousveillance*, which, she writes, "plots imaginaries that are oppositional and that are hopeful for another way of being" (Browne 2015: 21).[16] Dark sousveillance is not a monolith, and thus involves a wide array of activities. Some examples observed at BLM protests include disabling location settings on cellphones to prevent the collection and analysis of positional data and the use of face coverings to deter facial recognition systems. Political dissidents have also weaponized social media to share acts of police violence and identify undercover cops, among other acts of resistance. Through these mediums, Black activists engage in dark sousveillance as

[14] See "Rouge deputy chief poses as protestor and curses about cops at Fargo rally, police say" in the *Tri-City Herald*: https://www.tri-cityherald.com/news/nation-world/national/article243268486.html.
[15] See "After Barr Ordered FBI to 'Identify Criminal Organizers,' Activists Were Intimidated at Home and At Work" in *The Intercept*: https://theintercept.com/2020/06/12/fbi-jttf-protests-activists-cookeville-tennessee/.
[16] Dark sousveillance can also be practiced by non-Black agents if their goals align with Black liberation. Moreover, Browne uses dark sousveillance to specifically reference the methods in which enslaved people escaped plantation captivity and surveillance. However, I repurpose her term to reference more broadly the ways in which marginalized agents "render [themselves] out of sight" through "co-opted, repurposed, and challenged" means (Ibid.: 21).

a means of combatting – as well as making visible – the carceral state's violent modes of security and discipline.

During the summer of 2020, infographics on how to deter surveillance at protests saw widespread circulation in the days and months following the onset of national civil unrest. In the example below (see figure 1), emphasis is placed on what to wear, what to bring, and what not to bring in order to protest safely. These outlined items and actions actively engage in dark sousveillance: wearing "layered clothing," that is "nondescript, solid [in] color" and "cover[s] identifying tattoos" combats against post-event identification and subsequent punishment. Protective goggles and masks insulate against the suffocating effects of tear gas while also mitigating the spread of COVID-19, which ran rampant throughout the United States during the 2020 protests. Pouring water in the eyes of those exposed to tear gas is also advised in the graphic; however, I observed milk to be an alternative treatment used at protests in Columbus, Ohio. My previous comment on disabling cellphone locational data is underscored by the graphic, which further advises disabling cellphone biometrics such as fingerprint or face ID. Seasoned activists moreover urged those attending BLM demonstrations to blur the faces of protestors when posting or reposting images on online forums. This tactic is meant to protect the identity of targeted dissidents who may be threatened with increased surveillance and harassment by security forces via online monitoring. Indeed, following the mysterious death of Edward Crawford – a Black man who was photographed throwing a tear gas canister during the 2014 Ferguson protests – some activists have exercised increased caution when sharing their political advocacy on social media. Although the connections between the infamous photo and Crawford's death remain murky, in the years following the 2014 Michael Brown protests,[17] at

[17] Michael Brown Jr. was an 18-year-old Black man who was fatally shot by Ferguson police officer Daniel Wilson on 8 August 2014.

least five other prominent Ferguson activists have died in crude, mysterious ways: 31-year-old Bassem Masri was found unconscious on a bus and later died of a fentanyl-induced heart attack; 20-year-old Deandre Joshua and 29-year-old Darren Seals were found dead in torched cars; and 23-year-old Marshawn McCarrel along with 24-year-old Danye Jones reportedly took their own lives.[18] Considering that even lesser-known BLM activists have received credible threats to their lives, resisting the urge to post non-anonymized photos or videos of demonstrators on social networks is crucial when attempting to protest safely. Therefore, I find dark sousveillance to be another intention of BLM protestors.

Figure 1: An infographic describing how to protest safely during summer 2020 (source: Alexandria Ocasio-Cortez [@aoc] on Instagram)

These attempts at resistance, notwithstanding their first amendment protections, are not exempt from police retaliation. For example, in Asheville, North Carolina, police outfitted with

[18] See "A puzzling number of men tied to Ferguson protest have since died" in the *Chicago Tribune*: https://www.chicagotribune.com/nation-world/ct-ferguson-activist-deaths-black-lives-matter-20190317-story.html.

riot gear laid siege to a medic station where they destroyed medical supplies and drinking water belonging to BLM activists. During the chaos, peaceful protestors and medics, the latter of whom were clearly identified as such, were harmed. In a video documenting the incident, one eyewitness stated that "we had eye wash, sutures, EMTs and doctors… [the police] came in full riot gear, hit us with shields, threw several people to the ground. We were grabbed, thrown, shouted at, screamed at, treated as criminals. No one resisted."[19] Despite being ascribed to protestors, violence and property destruction are not unique to protestors. Police forces engage in these actions as well, often-times at scale.[20] However, the police are able to shape public perceptions around their actions through numerous psychological mechanisms; these include negatively framing protests to discourage participation, courting the media through strategic public relations campaigns, and painting protestors as "violent anarchists" that must be suppressed (Fernandez 2008). Police, as a result, often-times receive the benefit of the doubt, effectively masking their actions as justifiable insurances of security. Through these aforementioned *securitization*[21] (Arandau 2001) techniques, the police, along with courted media, are able to cast a vilified gaze onto the "unruly" mob of Black radicals. Take Fox News Host Tucker Carlson's comments on the 2020 BLM protests, for example:

> [BLM activists] encourage theft and mayhem as if that will help; that will not help. This may be a lot of things, this moment we're living through, but it is definitely not about Black lives; and remember that when they come for you, and at this rate, they will.

[19] See "Fact check: Police did destroy a medic area during protests in Asheville, North Carolina" by USA TODAY: https://www.usatoday.com/story/news/factcheck/2020/06/03/george-floyd-protests-police-destroy-medic-station-asheville/3124847001/.

[20] As David Graeber (2007) notes, the idiosyncratic view of violence held by journalists often absolves police of their actions. "This has the effect that if even one protestor damages a Starbucks window, one can speak of "violent protests", but if police then proceed to attack everyone present with tasers, sticks and plastic bullets, this cannot be described as violent" (Ibid: 4).

[21] In the words of Fernandez, "securitization is all about securing and protecting citizens from a threat, which gives the state legitimacy to undertake extreme measures to protect itself and keep larger citizenry secure" (Ibid.: 161).

> Anyone that has been subjected to the rage of the mob knows the feeling; it is like being swarmed by hornets, you cannot think clearly. And the temptation is to panic – but you can't panic, you got to keep your head and tell the truth. Tell the truth, if you show weakness of any kind, they will crush you[22]

I highlight Carlson's demonization of BLM activists not because it is unique – similar sentiments are prevalent throughout the far-right media ecosystem – but as an example of racialized fearmongering. By diminishing BLM protests to peculiar accounts of violence, Carlson is able to distract his audience from the legitimate grievances that sparked political mobilization in the first place. This further undermines the goals of the movement and casts doubt on its perceived validity, leaving those with preconceived notions of Black political action to further revile the BLM movement. It also produces a *chilling effect*[23] (Ibid.: 161 – 164) for those on the fringe of support – those who "support BLM but not burning down cities." As a consequence, those unsympathetic to the cause are willing to turn a blind eye to police violence. Indeed, many have even called for it. In the wake of this mounting antipathy, Fernandez argues that "it is up to the protestors to see through the police rhetoric" and "formulate new messages that release them from the violent anarchist frame" (Fernandez 2008: 164). But I ask, why must the onus of public decency fall upon the disenfranchised? Is blatant injustice not reason enough to support political mobilization? Or is that support contingent on the fragility and comfort of unaffected populations? In a world of rampant state violence and growing inequality, one might

[22] See "Tucker Carlson says protests are 'definitely not about black lives,' prompting backlash" in *The Washington Post*: https://www.washingtonpost.com/nation/2020/06/09/fox-black-lives-carlson/.
[23] According to Fernandez, "the chilling effect is the cooling off that can occur in a local community and within a movement. It is the result of a technology of control that produces fear. Local communities are afraid to aid or join a protest, and those that do are compliant and self-policing" (Ibid.: 161).

argue that solidarity should not be hard to come by; the divisive rhetoric of anti-BLM demagogues such as Tucker Carlson,[24] I fear, has contributed to rendering it a rare commodity.

In the end, it is the spatial struggle between actors and intentions that precipitates uneven outcomes concerning mobility and power. This unevenness is, as we just discussed, core to our inquiry on the surveillance-space dialectic within the racialized confines of BLM protests. To further develop these claims, I turn to the police surveillance tools and techniques of cell-site simulators, aerial surveillance, and social media monitoring. In the three sub-sections that follow, I rely on these particular modes of surveillance to uncover how police agencies shape physical space through digital or computerized means.

Cell-Site Simulators

> Mile after mile and week after week, the fire spread. New blazes responded to the original ones, appearing where they were least expected. The grapevine can't be wiretapped (The Invisible Committee 2009: 56).

At protests, police are able to track the positional data of cellphones through the use of cell-site simulators. These tools, which are also known as Stingrays or IMSI (international mobile subscriber identity) catchers, trick nearby cellphones into revealing their locations relative to the device by imitating legitimate cell towers. Because cellphones automatically connect to towers that output the strongest signals, cell-site simulators typically masquerade equivalent or even "stronger" signals to trick targeted devices.[25] Once connected, police are able to capture and log the positional data of all cellphones within a given radius, facilitating the

[24] The nation, state, and capital (i.e., U.S. imperialism) are the main drivers of racialized oppression. I do not wish to pin the blame strictly on Fox News commentors – they are just one (incredibly small) piece of the puzzle. BLM protests need to be placed in the greater context of anti-capitalist struggle, which takes place on a global scale. However, that is beyond the scope of this paper.

[25] See "Cell-Site Simulators/ISMI Catchers" on EFF.org: https://www.eff.org/pages/cell-site-simulatorsimsi-catchers.

covert surveillance of potentially thousands of individual devices at a time.[26] Moreover, depending on the model, cell-site simulators can uncover the identifying information (i.e., IMSI) of cellphones "pinged" by their signals. They can also intercept calls, text messages, and emails as well as uncover the metadata of such communication, including the duration of correspondence, when correspondence took place, and who is being contacted. Some have been advertised to alter or deny wireless communications, while others are even capable of downloading malware. [27] This technology can also be attached to vehicles and aerial surveillance tools such as unmanned drones and helicopters, allowing the police to expand the spatial reach of their surveillance upwards of multiple city blocks. According to leaked advertisements, wearable and handheld IMSI catchers have also been developed, further bolstering their mobile capabilities.[28]

It is unclear when cell-site simulators first saw widespread deployment in the United States, as police use of this technology remains shrouded in secrecy. However, declassified FBI documents reveal that the federal government has had access to Stingray technology since at least 1995.[29] In the context of demonstrations, the Miami-Dade Police Department are documented as first purchasing a "wireless tracking system" to retroactively surveil protestors at the Free Trade of the Americas (FTAA) Conference in November 2003.[30] Thanks to federal

[26] See "Stingrays: A Secret Catalogue of Government Gear for Spying on Your Cellphone" in *The Intercept*: https://theintercept.com/2015/12/17/a-secret-catalogue-of-government-gear-for-spying-on-your-cellphone/.
[27] See "3G-GSM Tactical Interception & Target Location" by Gamma Group, a technology firm that sells surveillance technology to law enforcement agencies around the world: https://info.publicintelligence.net/Gamma-GSM.pdf; "How Cops Secretly Track Your Phone" in *The Intercept*: https://theintercept.com/2020/07/31/protests-surveillance-stingrays-dirtboxes-phone-tracking/.
[28] See "The body-worn 'IMSI catcher' for all your covert phone snooping needs" in *Ars Technica*: https://arstechnica.com/information-technology/2013/09/the-body-worn-imsi-catcher-for-all-your-covert-phone-snooping-needs/; "Kingfish" by *The Intercept*: https://theintercept.com/surveillance-catalogue/kingfish/.
[29] See "Subject: STINGRAY/CELL SITE SIMULATOR DEVICES" from the FBI (2013): https://epic.org/foia/fbi/stingray/FBI-FOIA-Release-02072013-OCR.pdf.
[30] See "Section #5 Emergency Purchases" from the Miami-Dade Police Department (2003): http://cdn.arstechnica.net/wp-content/uploads/2013/09/miami-dade.pdf.

funding, the police use of cell-site simulators has since expanded to include at least seventy-five police agencies across twenty-seven states and the District of Columbia. According to released records, the Homeland Security Investigations (HSI) division of the Department of Homeland Security (DHS) has used Stingrays at least 1,885 times between 2013 and 2017. Between 2017 and 2019, HSI used the technology at least 466 times. Due to lacking transparency, however, all of these statistics are probable underestimates.[31]

One of the major concerns regarding cell-site simulator technology is its ability to indiscriminately target all cellphones within the device's vicinity. This ubiquity allows police to surveil and subsequently criminalize all individuals with cellphones at protests, regardless of if they are actual participants or just mere bystanders. In addition to tracking devices in real-time, police can also uncover which legitimate cell-towers targeted devices have connected to prior to their capture by the simulator. This retroactive approach reveals the spatial history of targeted devices (ergo, targeted dissidents), allowing police to transcend geographic as well as temporal boundaries at protests. By crafting a spatial-temporal profile of cellphones, police can uncover details about an individual's life, such as where they live, where they attend school, when and where they tend to grab food, and more. Through these proxies, police investigators can unearth more intricate facets of a target's personal life, such as their political or religious affiliations. All of this information can be used to identify and implicate individuals associated with suspects in police investigations, even if they were not present at any protests themselves. Moreover, Stingrays are known to disable wireless services while they are connected to targeted devices,

[31] See "DHS Has Used A Controversial Cell Phone-Tracking Device More Than 1,800 Times" in *BuzzFeedNews*: https://www.buzzfeednews.com/article/adolfoflores/this-is-how-many-times-the-department-of-homeland-security;"Ice Records Confirm that Immigration Enforcement Agencies are Using Invasive Cell Phone Surveillance Devices" by the ACLU: https://www.aclu.org/news/immigrants-rights/ice-records-confirm-that-immigration-enforcement-agencies-are-using-invasive-cell-phone-surveillance-devices/; "Stingray Tracking Devices: Who's Got Them?" also by the ACLU: https://www.aclu.org/issues/privacy-technology/surveillance-technologies/stingray-tracking-devices-whos-got-them.

meaning that infected phones are unable to make calls while captured by the simulator. At demonstrations, this blockage can prevent targeted protestors from making emergency calls to public services, their loved ones, fellow dissidents, and others.

Cell-site simulators have been suspected of use at numerous BLM demonstrations across the United States. In December 2016, activists in Chicago photographed a city emergency management vehicle outfitted with what appeared to be radar technology. Two months before the incident, Chicago Police admitted to purchasing Stingray systems, providing further credence to activists claims that the vehicle was equipped with IMSI technology.[32] At a 2014 New York City protest against the police killings of Eric Garner and Michael Brown, Vienna Rye along with several other protestors reported that their phones suddenly switched off, lost reception, or otherwise began acting strangely at the Millions March demonstration. The New York City Police Department (NYPD) refused subsequent records request from Rye regarding the agency's use of cell-site simulators, asserting that they could neither "confirm nor deny" their deployment. However, following a lawsuit from Rye, the American Civil Liberties Union (ACLU), and others, the court ruled that the NYPD must disclose its use of cell-site simulators – or lack thereof – at the demonstration. Although the NYPD claims that they "do not engage in targeted or blanket interference with protestors phones," the department later disclosed that it had used Stingrays at least 1,016 times between 2008 and May 2015.[33]

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[32] See "Activists Say Chicago Police Used 'Stingray' Eavesdropping Technology During Protests" by *CBS Chicago*: https://chicago.cbslocal.com/2014/12/06/activists-say-chicago-police-used-stingray-eavesdropping-technology-during-protests/.

[33] See "Did the Police Spy on Black Lives Matter Protestors? The Answer May Soon Come out" in *The New York Times*: https://www.nytimes.com/2019/01/14/nyregion/nypd-black-lives-matter-surveillance.html; "NYPD, told it can't use 'Glomar' denial, now claims it has no records of Millions March cell phone surveillance" in *MuckRock*: https://www.muckrock.com/news/archives/2019/mar/21/css-nypd-glomar/; "NYPD Has Used Stingrays More Than 1,000 Times Since 2008" by the ACLU of New York: https://www.nyclu.org/en/press-releases/nypd-has-used-stingrays-more-1000-times-2008.

After attending a George Floyd protest in Milwaukee, local activist Frank Nitty told the *Wisconsin Examiner* about his experience facing digital disruption allegedly mediated by cell-site simulators. When attempting to livestream the protests on Facebook, he mentioned how "it'll start getting blurry…or sometimes I'll be live and I'll start talking, and my mouth is moving slower, so I know it's about to start." He further stated that "it always happens when something's about to go down," pointing to the convenience and seemingly perfect timing of such disruptions. Others experienced similar disruptions, with Samara Beans telling the newspaper that "every single video [she] started streaming live over Facebook was [suddenly] not streaming." Both activists noted that these sorts of malfunctions are peculiar and do not happen outside their attendance at protests.[34] Although Milwaukee police assert that cell-site simulators "were not used during the protest," the ACLU of Wisconsin found that in 2016, the department hid its use of Stingray technology from courts, defense attorneys, and the public. This type of secrecy is widespread, as "vague terms and omissions" are used by police across the country to conceal their use of cell-site simulators, as well as downplay the technology's capabilities.[35] To combat these surveillance tools, some protestors have downloaded encrypted-messaging apps like Signal to facilitate safe correspondence at protests.[36] Turning off one's phone, placing it on airplane mode, or just simply leaving it at home can help deter digital disruption or geolocation tracking. If the technology behind cell-site simulators is ever made open-source, hacktivists have discussed reverse engineering these systems to uncover new techniques of digital sousveillance.

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[34] See "Milwaukee protestors and residents feel they're under police surveillance" in the *Wisconsin Examiner*: https://wisconsinexaminer.com/2020/06/23/milwaukee-protesters-and-residents-feel-theyre-under-police-surveillance/.

[35] See "New Evidence Shows Milwaukee Police Hide Stingray Usage from Courts and Defense" by the ACLU: https://www.aclu.org/blog/privacy-technology/surveillance-technologies/new-evidence-shows-milwaukee-police-hide-stingray.

[36] This approach is not foolproof, as law enforcement agencies might hack targeted phones when faced with end-to-end encryption software. See "Encrypted Phone Firm Encrochat Used Signal Protocol" in Motherboard by *Vice*: https://www.vice.com/en/article/pkdjab/encrochat-signal-protocol-encryption.

This prospect is unlikely, however, as the intellectual property behind such equipment is hidden behind closely guarded trade secrets and non-disclosure agreements between law enforcement agencies and technology brokers.

Aerial Surveillance Technology

> The armed forces don't simply apply themselves to the metropolis, they produce it (The Invisible Committee 2009: 57).

The term "aerial surveillance" refers to multiple surveillance vehicles and technologies capable of monitoring broad geographic areas as well as targeted agents and objects from the sky. This includes drones, also called unmanned aerial vehicles (UAVs). UAVs are commonly equipped with high-definition cameras that are capable of generating live video feeds for both piloting and surveillance purposes. These systems vary drastically in their size, use, and functionality; small, multi-rotor drones are popular amongst the civilian population and law enforcement. Larger, more sophisticated drones akin to airplanes have also been deployed by police agencies. Drones can be equipped with global positioning systems (GPS), zoom capabilities, infrared cameras, heat sensors, timestamp technology, cell-site simulators, obstacle sensors, license plate readers, and facial recognition tools.[37] Some are even armed with lethal and non-lethal weaponry.[38] Although helicopters and airplanes have also been dispatched to surveil protests, unmanned drones provide a cheaper and overall, more optimal alternative to their

[37] See "Drones/Unmanned Aerial Vehicles" on EFF.org: https://www.eff.org/pages/dronesunmanned-aerial-vehicles.
[38] See "U.S. Army's New Drone Swarm May be A Weapon of Mass Destruction" in *Forbes*: https://www.forbes.com/sites/davidhambling/2020/06/01/why-new-us-armys-tank-killing-drone-swarm-may-be-a-weapon-of-mass-destruction/?sh=160f329fece8; "The Border Patrol Wants to Arm Drones" in *The Atlantic*: https://www.theatlantic.com/national/archive/2013/07/border-patrol-arm-drones/313656/; "Connecticut bill would make weaponized drones legal for cops" on CNN.com: https://www.cnn.com/2017/03/31/us/connecticut-drone-bill-trnd/index.html.

manned counterparts. Indeed, their ability to facilitate prolonged, covert, and advanced modes of surveillance at relatively minimal costs has inaugurated drones as a popular surveillance instrument amongst law enforcement.

Before being adopted by domestic police forces, drones were used primarily by the military. Although the concept of UAVs has existed since the mid-1850s, the first use of modern drones for dedicated reconnaissance purposes began during the Vietnam War.[39] The first recorded use of UAVs by American law enforcement was in 2005, when the Irwin Country Sherriff's Office contracted the technology for a missing persons case.[40] Within the last decade, drone use for non-military purposes has exploded; by March 2013, roughly one dozen police agencies had applied for drone permits. In 2018, that number skyrocketed to an estimated 910 U.S. agencies across state and local police, sheriff, fire, and other emergency services.[41] These drone permits were sought primarily to aid in search and rescues missions, traffic collision reconstruction, crime scene analysis, hazardous waste spill assessment, and active shooter investigations, among other duties.[42] Drones have also been deployed for crowd monitoring and surveillance at large-scale events, including at BLM protests.

Because aerial surveillance systems can be outfitted with myriad tools, the risks concerning activism infringement are unabating. Depending on the model, drones can track individuals and objects across a distance of roughly sixty-five square miles, as well as reach vertical distances upwards of 400 feet.[43] The small size of some drones combined with their wide

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[39] See "A Brief History of Drones: The Remote Controlled Unmanned Aerial Vehicles (UAVs)" in *Interesting Engineering*: https://interestingengineering.com/a-brief-history-of-drones-the-remote-controlled-unmanned-aerial-vehicles-uavs;
[40] See "How Drones (a.k.a. UAVs) are Flying into the Public Safety Sector" in *InTime*: https://intime.com/blog/technology/drones-uavs-public-safety-sector/.
[41] Ibid.
[42] Ibid.
[43] See "Domestic Unmanned Aerial Vehicles (UAVs) and Drones" by the Electronic Privacy Information Center: https://epic.org/privacy/drones/#background.

spatial reach allow drone operators to monitor entire demonstrations while keeping their data collection activities more-or-less hidden. Spy planes, while more grandiose in physical size and monetary cost, can achieve even greater heights and panoptic viewing ranges. For instance, the FBI's Cessna Citation jet that was used to monitor the 2020 June BLM protests in Washington, D.C. – as well as the 2015 Baltimore protests following the death of Freddie Gray[44] – flew between 13,000 and 17,500 feet in the air. According to records obtained by *BuzzFeed News*, the aircraft flew in a seven-mile radius above the city between the hours of 11 p.m. and 1:30 a.m. on 2020 June 1. It also circled around subsequent demonstrations on June 2, June 3, and June 6 (see figure 2), analyzing the movements of protestors attending largely peaceful gatherings.[45] On June 3 and June 4, the U.S. Air National Guard deployed an RC-26B surveillance aircraft that flew less than 7,000 feet above D.C. protests. According to eyewitness reports and flight records, the same vehicle was also deployed above protests in Las Vegas. In Minneapolis, a military-grade predator drone owned by U.S. Customs and Border Protection flew above protests in the city at approximately 20,000 feet.[46] The fixed altitude of such surveillance aircraft is largely contingent on the quality of cameras equipped to the vehicle – therefore, depending on the device in use and the goals of the operation, the flight patterns of surveillance aircraft can vary widely in scope and temporality. When flown at high altitudes, protestors are unable to discern if and when they are

[44] Freddie Gray was a 25-year-old Black man who was arrested for possession of a knife. He was murdered by Baltimore police while in their custody.
[45] See "The FBI Used Its Most Advanced Spy Plane to Watch Black Lives Matter Protests" in *BuzzFeed News*: https://www.buzzfeednews.com/article/peteraldhous/fbi-surveillance-plane-black-lives-matter-dc.
[46] See "Mysterious Planes Over Baltimore Spark Surveillance Suspicions" by the ACLU: https://www.aclu.org/blog/privacy-technology/mysterious-planes-over-baltimore-spark-surveillance-suspicions; "The Military and FBI Are Flying Surveillance Planes Over Protests" in Motherboard by *Vice*: https://www.vice.com/en/article/y3zvwj/military-fbi-flying-surveillance-planes-george-floyd-protesters;"Customs and Border Protection is Flying a Predator Drone Over Minneapolis" in Motherboard by *Vice*: https://www.vice.com/en/article/5dzbe3/customs-and-border-protection-predator-drone-minneapolis-george-floyd.

being monitored. At lower heights, aerial vehicles can be used to intimidate protestors, exacerbating group insecurity and surveillance-induced paranoia.

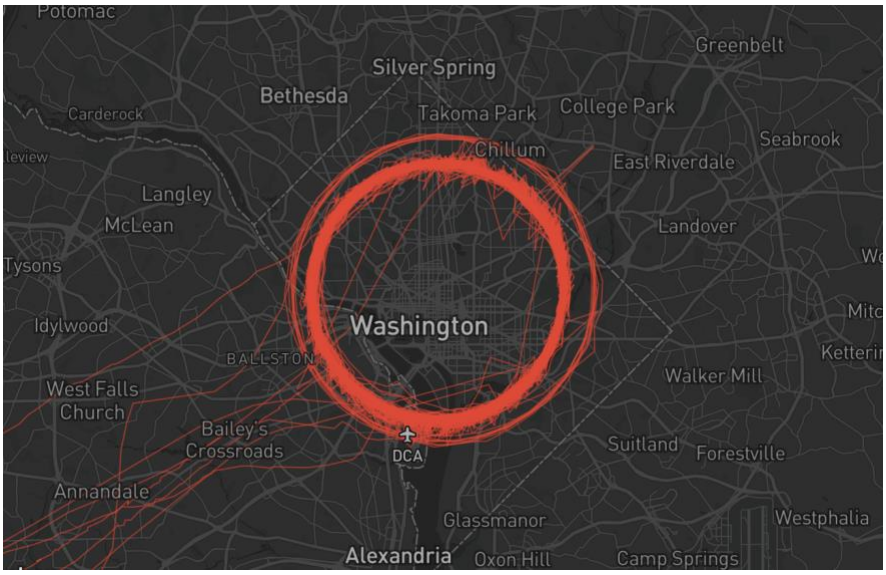

Figure 2: Flight patterns of the FBI's Cessna Citation jet over Washington, D.C. from 2020 June 1 to 2020 June 6 (source: Peter Aldhous from *Buzzfeed News*; data pulled from ADS-B Exchange and Flightrader24)

Aerial surveillance tools can craft spatial-temporal profiles of targeted groups and individuals through prolonged video or image capture. The derived geospatial information can be documented and retroactively analyzed, granting law enforcement agencies the ability to exercise various modes of security and discipline even several weeks after an alleged incident has taken place. This was observed in Philadelphia, where authorities used aerial surveillance along with social media monitoring and identity verification technology to track and arrest Lore Blumenthal, a woman accused of arson during a BLM protest.[47] The repository of geospatial data

[47] See "The FBI used a Philly protester's Etsy profile, LinkedIn, and other internet history to charge her with setting police cars ablaze" in *The Philadelphia Inquirer*: https://www.inquirer.com/news/philly-protests-arrests-fbi-lore-elisabeth-blumenthal-george-floyd-20200617.html.

used to inform such police action is immense. According to *The New York Times*, the DHS logged at least 270 hours' worth of surveillance footage from helicopters, airplanes, and drones across fifteen cities where George Floyd protests took place. This information was made available to federal and local law enforcement agencies for both immediate and future use.[48] Although it is unclear whether or not this footage has been requested or obtained by sub-national agencies, the ubiquity and relative invisibility of aerial surveillance has nonetheless rendered it a great challenge to dark sousveillance efforts. To return to our infographic on page sixteen (see figure 1), wearing nondescript clothing that covers identifying features is beneficial in combatting aerial surveillance vehicles that are outfitted with facial recognition and tattoo identification tools. When UAVs wield cell-site simulators, the aforesaid precautions that circumvent cellular disruption and surveillance can also be taken. However, the multifaceted nature of aerial monitoring renders it a difficult technology to subvert – by consequence, the advent of aerial surveillance has somewhat contributed to the transformation of our cities into what Hille Koskela dubs "enormous panopticons" (Koskela 2000: 243). At protests, resistance against these panopticons has proven to be an arduous task.

Social Media Monitoring Tools

> The Paris Commune found a partial solution to the keeping of records: they burned down City Hall, destroying all the public records and vital statistics. We still need to find the means to permanently destroy computerized databases (The Invisible Committee 2009: 116).

Social media monitoring is similar to aerial surveillance in that it is a *technique* of surveillance as opposed to a distinct surveillance technology. Instead of being deployed as one

[48] See "U.S. Watched George Floyd Protests in 15 Cities Using Aerial Surveillance" in *The New York Times*: https://www.nytimes.com/2020/06/19/us/politics/george-floyd-protests-surveillance.html.

discrete tool, social media monitoring can involve myriad technologies, such as facial recognition, machine learning, identity verification, natural language processing, manual labor, and so on. It can be supported or mediated by drones, cell-site simulators, police body cameras, and countless other surveillance instruments. To quote Freedom House, "social media surveillance refers to the collection and processing of personal data pulled from digital communication platforms, often through automated technology that allows for real-time aggregation, organization, and analysis of large amounts of metadata and content."[49] Platforms that have facilitated online monitoring include Facebook, Instagram, and Twitter, which, when combined with all social networks, host an estimated 3.6 billion people worldwide.[50] Roughly fifty-eight percent of the world's population are on social media, with about three quarters of the U.S. population being active on such platforms.[51] Social media monitoring tools and techniques have seen increased adoption by private companies, intelligence agencies, and police networks across both weak and strong states (Snowden 2019). These entities have operationalized the practice for anti-terrorism efforts, asylum vetting, profit maximization, and to subvert general threats to state security. Within the past decade, it has also been used to monitor and suppress political dissent at protests.

Perhaps the most notable facet of social media monitoring is its unmatched ubiquity. Because it can be augmented by advanced technology such as facial recognition and artificial intelligence (A.I.), online surveillance can be used to catalyze previously unimaginable modes of security and discipline. For example, in Philadelphia, local police used social media monitoring

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[49] See "Social Media Surveillance" by Freedom House: https://freedomhouse.org/report/freedom-on-the-net/2019/the-crisis-of-social-media/social-media-surveillance.
[50] See "Number of global social network users 2017-2021" in Statista: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/#:~:text=How%20many%20people%20use%20social,almost%204.41%20billion%20in%202025.
[51] See "Percentage of U.S. population who currently use any social media from 2008 to 2020" in Statista: https://www.statista.com/statistics/273476/percentage-of-us-population-with-a-social-network-profile/.

along with tattoo identification to arrest five individuals accused of property destruction at BLM protests in the city. One of these suspects was 23-year-old Sammy Rivera, a local artist who spent several weeks photographing the local demonstrations. Less than a week before his arrest, however, Rivera vowed to no longer share his photographs, writing in an Instagram post that "a couple people involved in the protests have been tracked down and arrested by police – photos and video footage of the protests were used to pick out protestors, who were then identified and tracked down via their online/social media presence." Shortly following his denunciation, Rivera was detained after police matched photos of a skateboard on his Instagram page to pictures of a skateboard allegedly used to damage state vehicles.[52] In the case of Lore Blumenthal (see *Aerial Surveillance*) FBI investigators used news helicopter footage along with photos on Instagram, an item review on Etsy, public information across Poshmark, LinkedIn, and a massage company website, and phone records in order to inform her arrest. Through these online mediums, publicly available data served as a mediator of security and subsequent punishment.

Social media surveillance at protests can also produce discriminatory outcomes. According to interviews conducted by *The Intercept*, the data analysis practices of New York-based facial recognition startup Dataminr – who monitored social media activity to inform police surveillance of the 2020 George Floyd protests – were prone to racial profiling. These practices included flagging "potential gang members" or "gang related activity" on Twitter for police forces despite there being no institutional definitions for either designation; creating "information feeds specific to certain housing projects populated predominately by people of color" when conducting geospatial analysis; and overlooking predominately White areas or armed White people when scanning social media for criminal activity. Moreover, despite touting

[52] See "An artist stopped posting protest photos online to shield activist from the police. Then, he was arrested" in *The Washington Post*: https://www.washingtonpost.com/nation/2020/08/03/philadelphia-arrest-protest-photos/.

itself as an A.I. and machine learning firm, insider sources claim that the company relied heavily on manual labor for its surveillance operations, exacerbating concerns of human bias.[53] As a result of these various practices, racialized feedback loops were formed through the preconceived notions of both law enforcement and Dataminr analysts. As one source puts it, the process amounted to "White people, tasked with interpreting language from communities that we were not familiar with."[54] Considering that Geofeedia, Clearview AI, Amazon, and numerous other technology brokers also provide online data to the state, the risk of First Amendment infringements cannot be ignored. Indeed, although not direct actors at protests, corporate enterprises like Dataminr do in fact mediate the various forms and formats of racialized security implemented at protests.

In addition to being ubiquitous and racializing, social media surveillance can also have direct impacts on mobility. Although conducted largely outside the physical space of protests, the activity can, among other things, identify potential participants in demonstrations before such events even take place. This is due in part to platforms like Facebook being popular conduits for community organizing and event communication, rendering pages dedicated to such topics (i.e., Facebook groups) prime targets for monitoring. In the case of Mike Avery (see Introduction), the activist communicated through Facebook that he was en route to St. Louis after attending a BLM protest in Minnesota. According to police reports, Avery "provided tutelage as to how looting occurred in Minnesota, describing how certain businesses were vandalized and others left intact."

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[53] Algorithmic bias, which is understood as systematic errors that replicate human biases via digitized code, would be of equal concern. Facial recognition systems, for example, have seen widespread adoption by police forces and intelligence agencies despite being prone to racial bias. See the National Institute of Standards and Technology's assessment of the demographic effects of facial recognition [PDF]: https://nvlpubs.nist.gov/nistpubs/ir/2019/NIST.IR.8280.pdf; "Clearview AI CEO says 'over 2,400 police agencies' are using its facial recognition software" in *The Verge*: https://www.theverge.com/2020/8/26/21402978/clearview-ai-ceo-interview-2400-police-agencies-facial-recognition.

[54] See "Twitter Surveillance Startup Targets Communities of Color for Police" by *The Intercept*: https://theintercept.com/2020/10/21/dataminr-twitter-surveillance-racial-profiling/.

He also allegedly "encouraged 'masses' to participate in such activities in St. Louis" (Avery affidavit 2020: 4). This online activity, analyzed over the course of seventy-two hours, served as the key piece of evidence used in the affidavit of criminal complaint against Avery. Shortly after that affidavit was submitted, Avery was arrested at his home in St. Louis upon returning from his trip to Minneapolis. Although later released, this arrest prevented the activist from participating in demonstrations taking place in his city and elsewhere. Moreover, the illegal detainment served to discourage Avery, along with those proximate to him, from participating in further political action, both through online mediums and at physical protests.

Activists have achieved various modes of dark sousveillance to undermine social media monitoring. Along with the examples discussed in previous sub-sections, marginalized agents have used fake names and anonymous profiles when organizing or engaging in political activity via online platforms. Changing the privacy settings of Facebook groups, blocking unwelcomed or suspicious users, establishing group rules, and moderating content posted on activist forums also aides in sousveillance efforts. Activists have also used social media to document and share acts of police brutality. In Philadelphia, widely circulated videos of Staff Inspector Joseph Bologna Jr. violently beating a BLM protestor with his baton prompted a criminal investigation that culminated in the officer's identification and eventual arrest.[55] Moreover, in Columbus, Ohio, videos of police pepper-spraying BLM protestors, including Representative Joyce Beatty, Columbus City Council President Shannon Hardin, and Franklin County Commissioner Kevin Boyce, sparked nationwide condemnation.[56] A few days after the incident, student reporters from

[55] See "A fired Philly cop who hit a Temple student with his baton during George Floyd protests was cleared of criminal charges" in the *Philadelphia Inquirer*: https://www.inquirer.com/news/joseph-bologna-philadelphia-police-beating-protester-george-floyd-20210115.html.
[56] See "The Congresswoman Pepper-Sprayed by Police" in *The Atlantic*: https://www.theatlantic.com/politics/archive/2020/05/congresswoman-pepper-sprayed-joyce-beatty/612436/.

The Ohio State University, despite repeatedly identifying themselves as news media and thus exempt from the citywide curfew, were also pepper-sprayed by the Columbus Police (CPD).[57] The video depicting the incident quickly made its way through the campus milieu, outraging many students, administrators, faculty members, and parents. For those of us calling upon Ohio State to sever its contractual ties with the CPD, this brazen attack against our fellow students only amplified the demands for police divestment – the results of which have yet to be seen.

These methods of online resistance come with two particular caveats. First, it is important to note that social media companies own the legal rights to the vast majority of material disseminated on their platforms, which includes posts by private users and commentary in private groups. This information may be sold to law enforcement by firms in order to derive profit – it might also be handed over freely. Second, due to rampant institutional corruption and the strength of police unions, officers accused of using excessive force are rarely met with disciplinary action, even if such acts are caught on video.[58] Indeed, in the case of Joseph Bologna Jr., the officer was eventually cleared of the criminal charges brought against him despite his actions being clearly observed in public space. This is the case with most acts of police brutality caught on video. While discouraging, these barriers alone do not prevent protestors from broadcasting state-sanctioned violence to the masses, as such documentation only further exposes the public to the state's systematic recusal of First Amendment protections. Even the police have taken notice; in several instances across the country, riot troops have been photographed covering their badge numbers, nametags, and other identifiers when stationed at

[57] See "Lantern Journalists Pepper-Sprayed by Police" in *The Lantern*: https://www.thelantern.com/2020/06/lantern-journalists-targeted-by-police-pepper-sprayed/.
[58] See "A Stacked deck: How police forces get away with killing more than 1,000 Americans a year" in *Insider*: https://www.insider.com/how-police-allowed-to-kill-americans-laws-2020-6; "How Did Police Unions Get So Powerful?" in *The Nation*: https://www.thenation.com/article/society/police-unions-nypd-history/.

protests.[59] This peculiar mode of counter-sousveillance communicates that police fear, at least to some degree, the new frontiers of resistance being pioneered by political activists.

5. Implications

In closing chapters of his book, Klauser informs his inquiry on the surveillance-space dialectic by investigating the geographic outcomes of 'surveillance and the every day.' He references a growing body of research that understands information accumulation and analysis beyond its threats to privacy and towards its tendency to categorize, profile, and uphold differential treatment of marginalized individuals and social groups; he asks, "how does surveillance orchestrate (restrict/facilitate/organize) flows and presences in and through particular spaces" (Klauser 2017: 143)? To answer this, he turns to the spatial logics of separation and enclosure, access control, and management of circulations. These terms are employed to communicate the methods in which space is produced via surveillance and then experienced by its various actors. My goal here is not to explore these orchestrations of space in depth, but to instead use their overarching logic of socio-spatial control and struggle to uncover the geographic implications of technological surveillance at demonstrations. By interrogating how police exercises of security and discipline interact with and respond to various displays of dissent, we can theorize how the zeitgeist of big data intensifies the social control of dissent – and what this means for activism.

Unlike schools, restaurants, or shopping centers, demonstrations are not tangible objects in space. They are observable once activated, but, unlike these aforesaid places, they are not

[59] See "Some police have appeared to cover their badges with black bands at protests. Police say it is to mourn fallen officers, advocates say it is to hide misconduct" in the *Insider*: https://www.insider.com/do-police-cover-badges-to-mourn-or-to-hide-violence-2020-6.

perceived outside of the human agents that comprise them. In other words, protests are only made possible through the presence and actions of activists, bystanders, law enforcement, etc., that occupy sidewalks, highways, buildings, and other pre-existing places. As such, the spatial logics informing the surveillance technologies deployed at protests and other large-scale events differ from the spatial logics informing, say, everyday surveillance at the local supermarket. For our purposes, cell-site simulators, aerial surveillance technologies, and social media monitoring tools would not be deployed to monitor protests if there were no protests in need of policing or dissidents in need of neutralizing. This implies that protestors produce space and police forces then react to that production of space. Police react by re-orchestrating space through exercises of security and discipline, and protestors, in turn, combat this re-orchestration through direct action, civil disobedience, and sousveillance efforts. The space of protests is therefore in constant flux, arbitrated by the conflicting intentions of both police and protestors. I refer to this phenomenon as *the spatial struggle of protests*,[60] where police and protestors quarrel at demonstrations to produce a political space that best serves their interests. The spatial struggle of protests is multi-dimensional insofar that the necessary actors interact in a place that *does exist* to gain dominance over a space that *does not exist*. To clarify, the built or natural environments where protests take place do indeed exist as physical objects – however, the protest itself, which is the "space" both actors hope to dominate, does not exist, as it is merely an expression of political grievance and not a tangible object. While unilateral control over a physical space might be an important goal of both parties, they achieve this through indirect means, such as inducing or mitigating paranoia, shaping public perceptions around their actions, forming collaborative partnerships, and so on. As a result, the spatial struggle of protests is as much an ideological ordeal as it is a

[60] The spatial struggle of protests is a derivative of the surveillance-space dialectic. It can also be understood as the power-geometry of protests.

temporal or geographic one. So, what are some of the empirical outcomes of this socio-spatial theory? I will highlight three.

First, as law enforcement agencies deploy new and sophisticated technologies to digitally monitor protests, activists tend to develop new techniques of resistance that counteract police attempts at repression. This was observed in Portland, where activist and coder Christopher Howell used his knowledge of neutral net technology to build a facial recognition database comprised of the faces of Portland Police officers, turning a tool used to facilitate state surveillance into an accountability mechanism. Belarusian technologist Andrew Maximov moreover uploaded a YouTube video showcasing how facial recognition software can be used to unmask masked police officers, and Italian artist Palao Cirio collected photos of 4,000 police officers to support the development of an anti-police facial recognition app.[61] As Jefferson asserts, "effective resistance has been a matter of turning the digital infrastructure of the racial state against itself" (Jefferson 2020: 192). However, this constant need to co-opt, repurpose, and adopt new practices and precautions breeds precarity among the participants of protests, as they become increasingly aware that their activism is under constant scrutiny and is thus more prone to retaliation vis-à-vis security and discipline. There is, in effect, an *emotional labor of surveillance* (Van Oort 2018) that must be endured while participating in the spatial struggle of protests. Although Madison Van Oort uses the term to reference how retail workers must "resist becoming overwhelmed" (Ibid: 1176) amid the multiple stress-inducing surveillance technologies that constantly monitor and log their activities, the emotional labor of surveillance can also be used to deduce the psychological drudgery inherent in constantly needing to subvert

[61] See "Activists Turn Facial Recognition Tools Against the Police" in *The New York Times*: https://www.nytimes.com/2020/10/21/technology/facial-recognition-police.html.

police action (e.g., dark sousveillance), while also fearing the retribution that typically follows such resistance.

Second, the deployment of new surveillance technologies has changed the spatial-temporal dimensions of protests. Similar to how technological innovation has precipitated a *time-space compression* (Harvey 1989) of the global economy, emerging technological tools and techniques deployed for surveillance have precipitated changes in the spatial practice of protests. The ability to collect, analyze, and categorize constant inflows of data have allowed police to manipulate the imaginative space of demonstrations, bringing political dissidents evermore closer to the carceral state. For example, drones allow law enforcement to surveil and target protestors from a panoptic viewpoint that is physically outside the space of protests, as police operate these vehicles from control rooms that are typically far-removed from any demonstrations. Moreover, social media monitoring and cell-site simulator technology have granted police forces the ability to scan political activity before, during, and after protests. This has enabled the suppression of political mobilization before an event has taken place as well as the arrest of targeted individuals after an alleged crime has occurred. However, barring this change in spatial practice, there remains other nuances to the geography of contemporary demonstrations. While human agents have been drawn closer to the carceral state via advanced and persistent modes of surveillance, the spatial-temporal dimensions of political advocacy and policing have simultaneously expanded to the online and digital realms. This has allowed both actors to transcend the physical confines of protests – that is, the built or natural environments where physical demonstrations take place. Indeed, protests and policing protests are no longer distinct events in time, but instead take place on street corners, in Facebook groups, and between

the algorithmic nodes of computer networks. In the age of big data and the so-called internet of things,[62] the spatial struggle of protests knows no spatial nor temporal bounds.

Third, the spatial struggle of protests has enhanced racial criminalization. As police and technology brokers collect, analyze, and categorize the data on protestors, this information is used to further scrutinize the mobility of disenfranchised groups. New methods of surveilling protests have filled carceral databases with the demographic information and whereabouts of Black and Brown dissidents, further criminalizing their identities and political behaviors. Jefferson (2020) underscores this by highlighting the discriminatory aspects of the Chicago Police Department's gang database. He finds that "the gang-related classification can be a function of the density of individuals classified as gang related or local graffiti, spatial statistical analysis, or the discretion of elected officials, community members, or gang units." In effect, a calculated "ninety-five percent of the 134,242 cataloged throughout the gang database network were categorized as African American, Black, or Hispanic" (Ibid.: 191). In regard to my analysis, Dataminr's ability to label certain persons and activities as gang affiliated via discriminatory predispositions towards criminality has reproduced Black geographies of spatial subjugation while simultaneously reinforcing the innocence endemic to White geographies of spatial emancipation. It stands that one urban identity cannot exist without the other, as the increased focus on Black criminality detracts from the time and resources dedicated to monitoring other perceived "threats" to state security. This unrelenting drive to police Black political action has undermined not only the goals of the BLM movement, but also the ability of law enforcement to take White extremism seriously. This was observed on 2021 January 6, when a violent mob of majority White radicals stormed the U.S. Capitol building in an attempt to

[62] The internet of things refers to the network of computers and other physical objects that connect/share information with other technologies over the internet.

overturn the results of the 2020 presidential election. The participants of the riot openly discussed the possibility of violence for weeks; despite this, security forces failed to adequately prepare for the event, only identifying and arresting its participants in the days and weeks following the insurrection.[63] Compare this delayed response to the immediate modes of security and discipline observed at the 2020 BLM protests, over ninety-three percent of which were peaceful.[64] While a more in-depth analysis is required to fully unpack the political geography of these events, there is no doubt that the spatial struggle of protests precipitates uneven outcomes concerning mobility, space, and power.

6. Conclusion

This paper is by no means a comprehensive survey of the technological surveillance deployed at BLM protests, nor does it aim to be. My intention here was to highlight a few surveillance technologies used by law enforcement to police protests, and demonstrate how these tools shape the physical, imaginative, and racial dimensions of such events. I have argued that cell-site simulators, aerial surveillance, and social media monitoring tools have allowed police to transcend the spatial-temporal bounds of protests, facilitating the criminalization and subsequent suppression of BLM activists before, during, and after physical demonstrations. I have borrowed from Michel Foucault's model of security and discipline to contextualize the motivations underpinning state surveillance, and I have used Simone Browne's notion of dark sousveillance to communicate the unique ways in which marginalized agents subvert digital monitoring. And

[63] See "Capitol Rioters Planned for Weeks in Plain Sight. The Police Weren't Ready" in *ProPublica*: https://www.propublica.org/article/capitol-rioters-planned-for-weeks-in-plain-sight-the-police-werent-ready.
[64] See "Demonstrations & Political Violence in America: New Data for Summer 2020" by the Armed Conflict Location & Event Data (ACLED) Project: https://acleddata.com/2020/09/03/demonstrations-political-violence-in-america-new-data-for-summer-2020/.

finally, I have referenced Henri Lefebvre's theories on the production of space and the society-space dialectic to advance my own claims on the spatial struggle of protests, which I posit exacerbates the social precarity hitherto experienced by Black and Brown populations. And while I trust that this socio-spatial inquiry will provide a useful framework for advancing Black epistemologies of space and power, there is, of course, always room for improvement. Future research in this area might entail a comparative analysis between BLM protests and their antithetical spaces of political grievance – such as the aforesaid U.S. Capitol insurrection – in order to adequately buttress my arguments of spatial unevenness and discrimination. Moreover, feminist and class-oriented inquiries into the spatiality of BLM protests are necessary if we wish to fully comprehend the intersectional dimensions of identity-based activism. Regardless of how we decide to further investigate these issues, one thing is for certain: there is much more work that needs to be done.

The BLM movement of 2020 was a global phenomenon. Protestors in the United States and around the world moved to challenge police brutality on a scale never before seen, with thousands of these activists risking their personal safety for the cause. Their resilience – to which this essay owes its preceding content and to which I owe my sincere gratitude – cannot be understated. The contributions of these activists go far beyond informing nebulous academic theories, I might add, and are thus worth mentioning in brief. Indeed, because of these historic protests, new and transformative notions of social justice outside of reform were popularized. Trumpeting demands for police divestment enthralled the public imagination, and once taboo conversations on police abolition suddenly broke into the mainstream. Across the United States, "defund the police" became a popular rallying cry amongst BLM activists. Many began to view their city's inflated police budgets as blights on social progress and thus advocated for immediate

divestment away from law enforcement. They argue that equitable housing initiatives, drug rehabilitation programs, and mental health services present a reasonable (and relatively cost-effective) alternative. Their position has some merit. In Dallas, this model proved valuable after the city began dispatching social workers – instead of police officers – in response to mental health crises. Following this change, one Dallas hospital saw "remarkable" drops in psychiatric patients being admitted to their emergency room; from thirty percent down to twenty.[65] Following the death of George Floyd, the Minneapolis city council reallocated $1.1 million worth of funding away from police and toward the local health department's violence intervention program.[66] Many have begun to view such "community-based" models of public safety as our natural progression beyond punitive policing. What was once deemed radical and peripheral is now considered plausible, perhaps even necessary.

For many, the prospect of police abolition represents another way of being. One that rejects the status-quo and its implicit structures of repression. One that is resolute in its tenants and emancipatory in its potential. One that is, above all else, hopeful for the future. And while this paper is not an essay on police abolition, I would be remiss to ignore the idea's prevalence during the 2020 BLM movement. It's implied logic of dismantling police surveillance technologies is also worth noting. Surely, the fruits of Black political action will nourish revolutionary sentiments against state-sanctioned surveillance in the years to come. At the same time these abolitionist ideologies permeate our collective conscious, the unjust murders of George Floyd, Breonna Taylor, Eric Garner, Elijah McClain, Philando Castile, Tamir Rice,

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[65] See "Dallas Has Been Dispatching Social Workers to Some 911 Calls. It's Working" in *Dallas Observer*: https://www.dallasobserver.com/news/dallas-has-been-dispatching-social-workers-to-some-911-calls-its-working-11810019.

[66] See "Minneapolis budget committee approves cuts in police funding" in *MPR News*: https://www.mprnews.org/story/2020/07/22/minneapolis-budget-committee-cutting-away-at-police-funding.

Freddie Gray, and countless other Black bodies at the hands of law enforcement will reverberate in our hearts and throughout our shared history. The ongoing protests in their names will remind future generations that, no matter the circumstance, an alternative is always possible. Although freedom might present itself as a constant struggle, my unwavering optimism leads me to believe that it is a struggle worth enduring. We shall see.

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